CLAIMS

22. (Currently Amended) An optical device capable of changing characteristics when subjected to localized heating comprising:

an optical wave guide; and

a material in contact with the waveguide, wherein the contact area between the waveguide and the material defines an interface, the material being arranged to absorb a predetermined wavelength of light, the predetermined wavelength being at an energy level sufficient to heat the material,

wherein the material is arranged to transfer at least some of the heat to a region of the waveguide at the interface to cause a permanent change in the optical properties of the region of the waveguide inherent stresses at the interface, thereby reducing optically induced alterations of the waveguide whilst the device is exposed to the light.